

## What is Claimed Is

- [c1] 1. A mobile power generation system, comprising:  
a main trailer having  
an engine, and  
an electric generator turned by the engine;  
an air filtration trailer having  
air filtration equipment for filtering air used as inlet air to the engine;  
an exhaust trailer having  
a part of an exhaust silencing system for reducing engine output noise; and  
an auxiliary trailer having  
auxiliary equipment for use during operation of the engine.
- [c2] 2. The system of claim 1, wherein the auxiliary equipment comprises one of engine start components, fuel components, fire system bottles, and a control house.
- [c3] 3. The system of claim 1, wherein the engine is a gas turbine.
- [c4] 4. The system of claim 1, wherein the engine is a turbine.
- [c5] 5. The system of claim 4, wherein the main trailer further comprises switchgear electrically connected to the electric generator.
- [c6] 6. The system of claim 5, wherein the switchgear is ultimately hardwired to the generator.
- [c7] 7. The system of claim 6, wherein the main trailer further comprises a generator lineside cubicle, and  
the switchgear is hardwired to the generator lineside cubicle.
- [c8] 8. The system of claim 7, wherein the main trailer further comprises  
a turbine lube oil system; and  
a generator lube oil system.
- [c9] 9. The system of claim 8, wherein the main trailer further comprises an exhaust collector,  
the exhaust collector comprising a drain system.
- [c10] 10. The system of claim 1, wherein the air filtration trailer further comprises one of

a male half and a female half of a filter trailer/main trailer docking station.

[c11] 11. The system of claim 10, wherein the main trailer further comprises the other of the male half and the female half of the filter trailer/main trailer docking station.

[c12] 12. The system of claim 1, wherein the air filtration trailer further comprises a filter house,

the filter house having

a drain,

filters for combustion air,

filters for ventilation air,

combustion air silencers, and

ventilation air silencers.

[c13] 13. The system of claim 1, wherein the exhaust trailer further comprises one of a male half and a female half of an exhaust trailer/main trailer docking station.

[c14] 14. The system of claim 13, wherein the main trailer further comprises the other of the male half and the female half of the exhaust trailer/main trailer docking station.

[c15] 15. The system of claim 1, wherein the exhaust trailer further comprises a vertical exhaust stack,  
the vertical exhaust stack being reversibly rotatable from a down position to an up position,  
the down position being for transport, and  
the up position being for use.

[c16] 16. A main trailer for use with a plurality of other trailers, the main trailer being capable of connecting to the other trailers to form a power generation system, the main trailer comprising:

a gas turbine;

an electric generator turned by the gas turbine;

a generator lineside cubicle; and

switchgear,

wherein the switchgear is hardwired to the generator lineside cubicle.

- [c17] 17. The trailer of claim 16, wherein the other trailers comprise  
an air filtration trailer having air filtration equipment for filtering air used as inlet  
air to the gas turbine;  
an exhaust trailer having a part of an exhaust silencing system for reducing engine  
output noise; and  
an auxiliary trailer having auxiliary equipment for use during operation of the  
engine.
- [c18] 18. The trailer of claim 16, further comprising an exhaust collector,  
the exhaust collector comprising a drain system.
- [c19] 19. The trailer of claim 18, further comprising one of a male half and a female half  
of a filter trailer/main trailer docking station.
- [c20] 20. A method of providing a mobile power generation system, comprising:  
providing a main trailer having  
    an engine, and  
    an electric generator turned by the engine;  
providing an air filtration trailer having  
    air filtration equipment for filtering air used as inlet air to the engine;  
providing an exhaust trailer having  
    a part of an exhaust silencing system for reducing engine output noise; and  
providing an auxiliary trailer having  
    auxiliary equipment for use during operation of the engine;  
attaching the air filtration trailer to the main trailer;  
attaching the exhaust trailer to the main trailer; and  
attaching the auxiliary trailer to the main trailer.
- [c21] 21. The method of claim 20, wherein the auxiliary equipment comprises one of  
engine start components, fuel components, lube oil cooler, fire system bottles, and  
a control house.
- [c22] 22. The method of claim 20, wherein the engine is a gas turbine.
- [c23] 23. The method of claim 20, wherein the engine is a turbine.
- [c24] 24. The method of claim 23, wherein the main trailer further comprises

switchgear electrically connected to the electric generator.

- [c25] 25. The method of claim 24, wherein the switchgear is ultimately hardwired to the generator.
- [c26] 26. The method of claim 25, wherein the main trailer further comprises a generator lineside cubicle, and  
the switchgear is hardwired to the generator lineside cubicle.
- [c27] 27. The method of claim 26, wherein the main trailer further comprises  
a turbine lube oil system; and  
a generator lube oil system.
- [c28] 28. The method of claim 27, wherein the main trailer further comprises an exhaust collector,  
the exhaust collector comprising a drain system.
- [c29] 29. The method of claim 20, wherein the air filtration trailer further comprises one of a male half and a female half of a filter trailer/main trailer docking station.
- [c30] 30. The method of claim 29, wherein the main trailer further comprises the other of the male half and the female half of the filter trailer/main trailer docking station.
- [c31] 31. The method of claim 20, wherein the air filtration trailer further comprises a filter house,  
the filter house having  
    a drain,  
    filters for combustion air,  
    filters for ventilation air,  
    combustion air silencers, and  
    ventilation air silencers.
- [c32] 32. The method of claim 20, wherein the exhaust trailer further comprises one of a male half and a female half of an exhaust trailer/main trailer docking station.
- [c33] 33. The method of claim 32, wherein the main trailer further comprises the other of the male half and the female half of the exhaust trailer/main trailer docking station.

[c34]

34. The method of claim 20, wherein the exhaust trailer further comprises a vertical exhaust stack,  
the vertical exhaust stack being reversibly rotatable from a down position to an up position,  
the down position being for transport, and  
the up position being for use.

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